

Good report

Forest Insect and Disease Management Group, S&PF
2500 Shreveport Highway
Pineville, Louisiana 71360

5230 Evaluation

September 17, 1976

Southern Pine Beetle outbreak on Tiak
Division, Ouachita N.F.

Forest Supervisor
Ouachita National Forest

ATTENTION: John Bumstead
Tiak Division, Ouachita N.F.

The following is a brief summary of a visit by Terry Rogers (9/10/76) of our FI&DM staff to discuss southern pine beetle biology and control philosophies with the personnel of the Tiak Division, Ouachita National Forest, Idabel, Oklahoma.

On Thursday, September 9, three to four SPB infested spots were visited and damage assessed. The SPB sites visited were either salvaged or in the process of being salvaged, and one spot had been chemically treated.

While assessing the SPB damaged sites, various aspects of SPB biology were discussed. Some of the points covered included number of generations per year, number of eggs laid by a female, amount of time to complete one generation, and what stages were currently present. When newly infested trees were encountered, several ways of recognizing them were pointed out. Some of the more reliable means of recognizing new green infested trees discussed included entrance holes and sawdust which often collects in the cracks and crevices of the bark. The removal of beetle infested timber was also discussed. It was suggested that priority be given to infested red and fading trees first, followed by removal of the green infested and buffer strip respectively.

One question which came up as a result of this discussion was whether or not to take a buffer strip when faced with more SPB infested timber than the local operators can handle. Experience has shown that to effectively control SPB in infested stands, a 40 to 70 foot buffer strip should be marked and cut adjacent to and ahead of the green infested trees where practical. This is the most effective practice in reducing the possibility of further breakouts because it increases the distance the beetle has to fly to another tree and promotes SPB dispersal should some infested green be missed. More importantly, however, buffer strips insure that infested trees beyond the apparent edge of the infested spot are not missed when the spot

in question is marked and salvaged. Buffer strips, therefore, add further insurance against the spread of the infestation beyond the sale boundary.

However, since the Tiak Division is currently facing a severe and possibly increasing SPB outbreak, which is almost beyond ability of local operators to keep up with, we reluctantly concur with the decision not to take a buffer strip providing that all the green infested trees are removed from the SPB infested spots. Binoculars should be used to make sure that green crown-infested trees are also detected and removed. These areas should then be re-examined where infested trees were removed by commercial sales within two or three weeks after treatment to check for additional infested trees. If additional green infested trees are found, they should be removed or treated chemically immediately. This re-examination will also allow detection of trees missed by the loggers.

When chemical control is used, only infested trees should be treated in accordance with FSM Supplement No. 8. When spraying, care must be taken not to spray red and fading trees which have been vacated by the SPB. This is to allow enemies of the SPB to complete their development. Again, areas treated chemically should be re-examined two or three weeks after treatment to check for additional infested trees.

When salvaging through commercial sales and/or treating with chemical control, the order of treating beetle infested timber should be as follows:

- Trees having fully developed broods and callow adults, usually red-topped trees and faders (trees in this category have to be checked before cutting).

- Trees having young broods, usually the green infested.

- Trees in the buffer zone.

Because of the current southern pine beetle epidemic on the Tiak Division, vigorous suppression activities should be continued this winter. Winter is particularly important because brood densities tend to be higher and are concentrated in fewer trees. Spot proliferation is also believed to be occurring at this time of year. Winter suppression activities could, therefore, reduce the number of new outbreaks next spring.

If you have any more questions concerning southern pine beetle biology or its evaluation, please give Terry Rogers a call - telephone 318-445-6511, Ext. 311, or FTS 8-497-3311. We are also available for training sessions. I hope we were of some assistance to you and your staff.

Enclosed for John Bumstead is a copy of the SPB appraisal forms. These are to be used along with the forms left at his office.

ROBERT C. LOOMIS

ROBERT C. LOOMIS
Field Representative, Alexandria
Forest Insect and Disease Management

Enclosure

cc: John Bumstead

TJR:elc